Cura Software User Manual

Cura Software

1.Installation of Cura14.07

a: Where can I find the software?

    1) TF card with shipment;

    2) download from Internet; b: Installation process

    1) From TF card with shipment

      Insert TF card and open the file

1.1 File location in the TF card

1)Insert TF card , open the file

名称 ▲	修改日期	类型	大小	
Installation Instruction	2016/7/7 星期四 …	文件夹		
Print Model STL	2016/6/22 星期三 …	文件夹		
Software	2016/7/7 星期四 …	文件夹		
Test file GCODE	2016/6/22 星期三 …	文件夹		
Tool List&other pictures	2016/7/7 星期四 …	文件夹		

名称 ▲	修改日期	类型	大小	
CH340G Drive	2016/7/7 星期四 …	文件夹		
Cura 14.07	2016/7/7 星期四 …	文件夹		
RepetierHost_1_0_5	2016/7/7 星期四 …	文件夹		

名称 ▲	修改日期	类型	大小	
Cura download link.txt	2016/7/1 星期五 …	文本文档	1 KB	
Cura_14.07.exe	2015/8/11 星期二 …	应用程序	18,377 KB	

2) Download from Internet

Official Website：https://ultimaker.com/en/cura-software/list

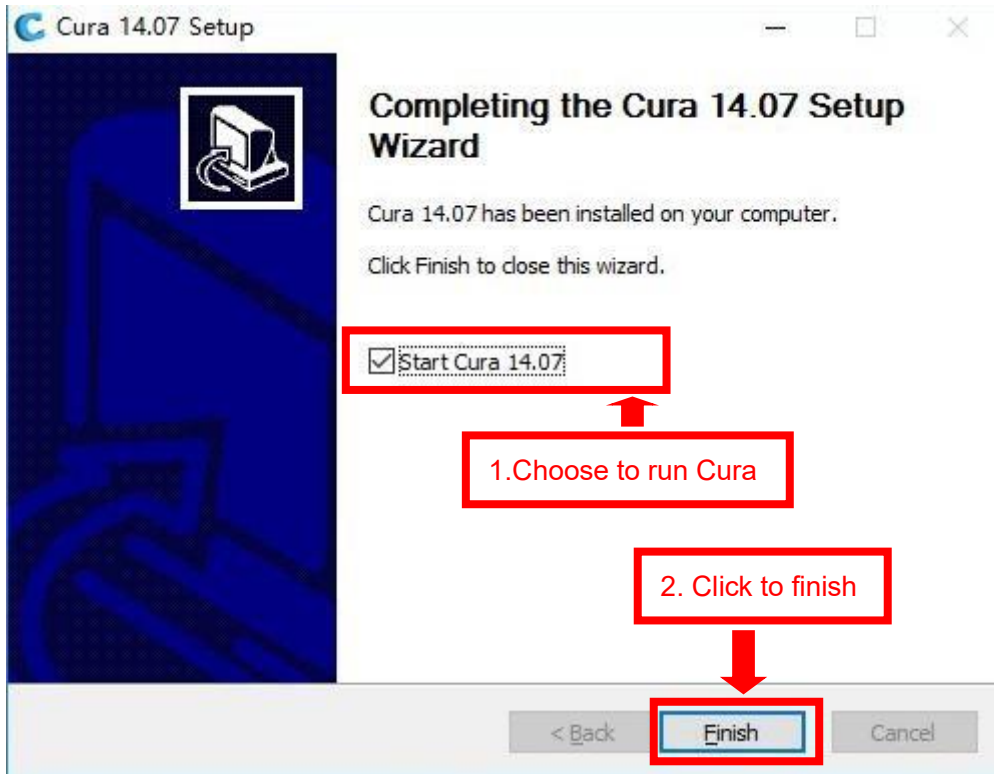# Choose corresponding software to download

■■ WINDOWS

Version: 2.1.2 32 bit	Release date: 6/7/16
Version: 2.1.2 64 bit	Release date: 6/7/16
Version: 15.04.6	Release date: 6/7/16
Version: 15.04.5	Release date: 3/17/16
Version: 15.04.4	Release date: 1/5/16
Version: 15.04.03	Release date: 11/4/15
Version: 15.04.2	Release date: 7/28/15
Version: 15.04	Release date: 4/15/15
Version: 15.02.1	Release date: 2/19/15
Version: 15.01	Release date: 1/30/15
Version: 14.12	Release date: 12/15/14
Version: 14.09	Release date: 9/19/14
Version: 14.07	Release date: 7/3/14
Version: 14.06	Release date: 6/16/14
Version: 14.03	Release date: 3/17/14
Version: 14.01	Release date: 1/10/14
Version: 13.12	Release date: 12/23/13
Version: 13.11	Release date: 11/22/13
Version: 13.10	Release date: 10/18/13
Version: 13.06.4	Release date: 6/26/13
Version: 13.04	Release date: 4/26/13
Version: 13.03	Release date: 3/8/13
Version: 12.12	Release date: 12/24/12
Version: 12.11	Release date: 11/12/12
Version: 12.10	Release date: 11/8/12

b.Software Installation Process

Cura 14.07 Setup — □ ×

Installing

Please wait while Cura 14.07 is being installed.

Extract: timer_query.py

Show details

Please wait for installation

Nullsoft Install System v2.46

< Back | Next > | Cancel

Device Driver Installation Wizard

Welcome to the Device Driver Installation Wizard!

This wizard helps you install the software drivers that some computers devices need in order to work.

1.Click Next

To continue, click Next.

< 上一步 (B) | 下一步 (N) > | 取消

Device Driver Installation Wizard

Completing the Device Driver Installation Wizard

The drivers were successfully installed on this computer.

You can now connect your device to this computer. If your device came with instructions, please read them first.

1.Installation Success

Driver Name	Status
✔ Arduino LLC (www.ardui...	Ready to use

2.Click to finish

完成   取消

Installation Complete

Setup was completed successfully.

Installation complete

Completed

Show details

Click Next

Nullsoft Install System v2.46

< Back   Next >   Cancel

Cura 14.07 Setup

Completing the Cura 14.07 Setup Wizard

Cura 14.07 has been installed on your computer.

Click Finish to close this wizard.

☑ Start Cura 14.07

1.Choose to run Cura

2. Click to finish

< Back   **Finish**   Cancel

Configuration Wizard

First time run wizard

Welcome, and thanks for trying Cura!

This wizard will help you in setting up Cura for your machine.

Click Next

< Back   Next >   Cancel

Configuration Wizard

Custom RepRap information

RepRap machines can be vastly different, so here you can set your own settings.
Be sure to review the default profile before running it on your machine.
If you like a default profile for your machine added,
then make an issue on github.

You will have to manually install Marlin or Sprinter firmware. 1. Choose other to customize

This is A8 V2 parameter

Machine name   ET5   You can customize name here.

Machine width (mm)   220   We default these data .
Machine depth (mm)   220   You can fill in according to
Machine height (mm)   250   actual condition
Nozzle size (mm)   0.4

Heated bed   ☑   Choose this option
Bed center is 0,0,0 (RoStock) ☐

DO NOT choose this option !!!

1.Click to finish

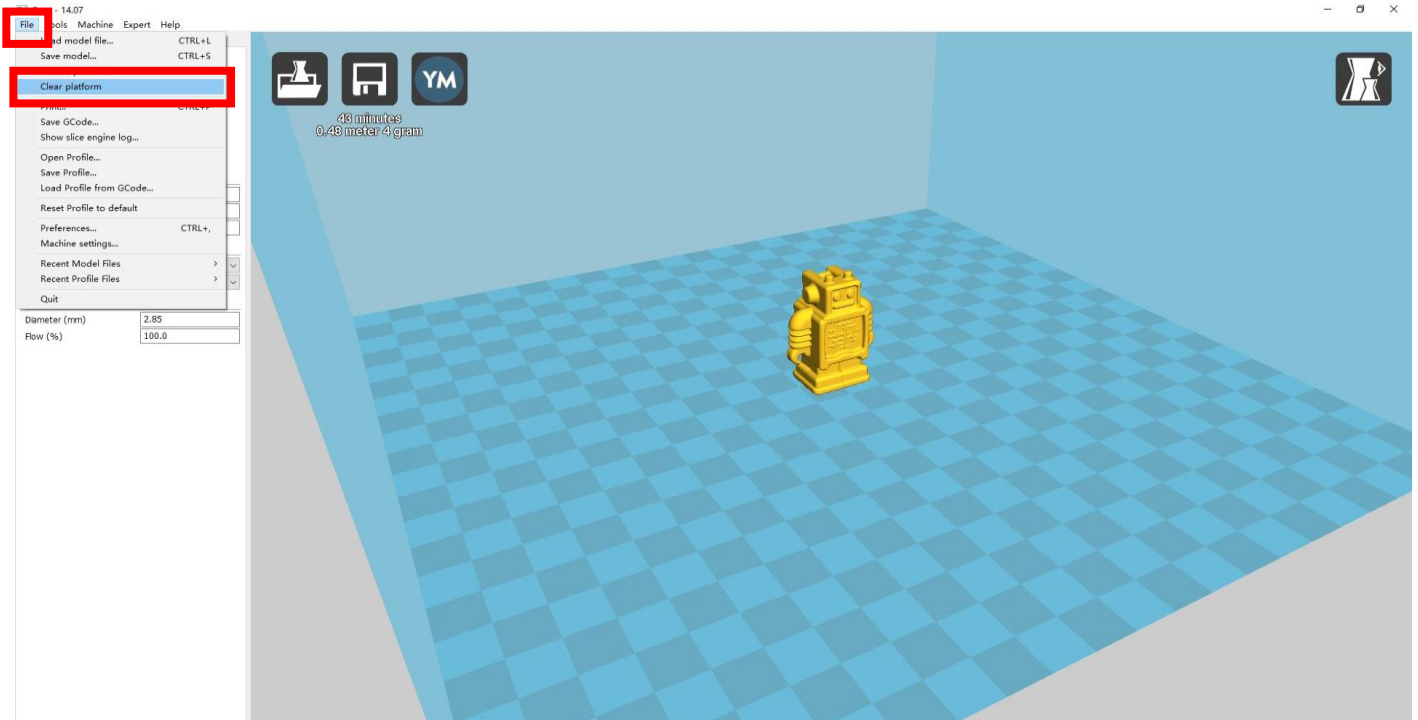< Back   Finish   Cancel

7
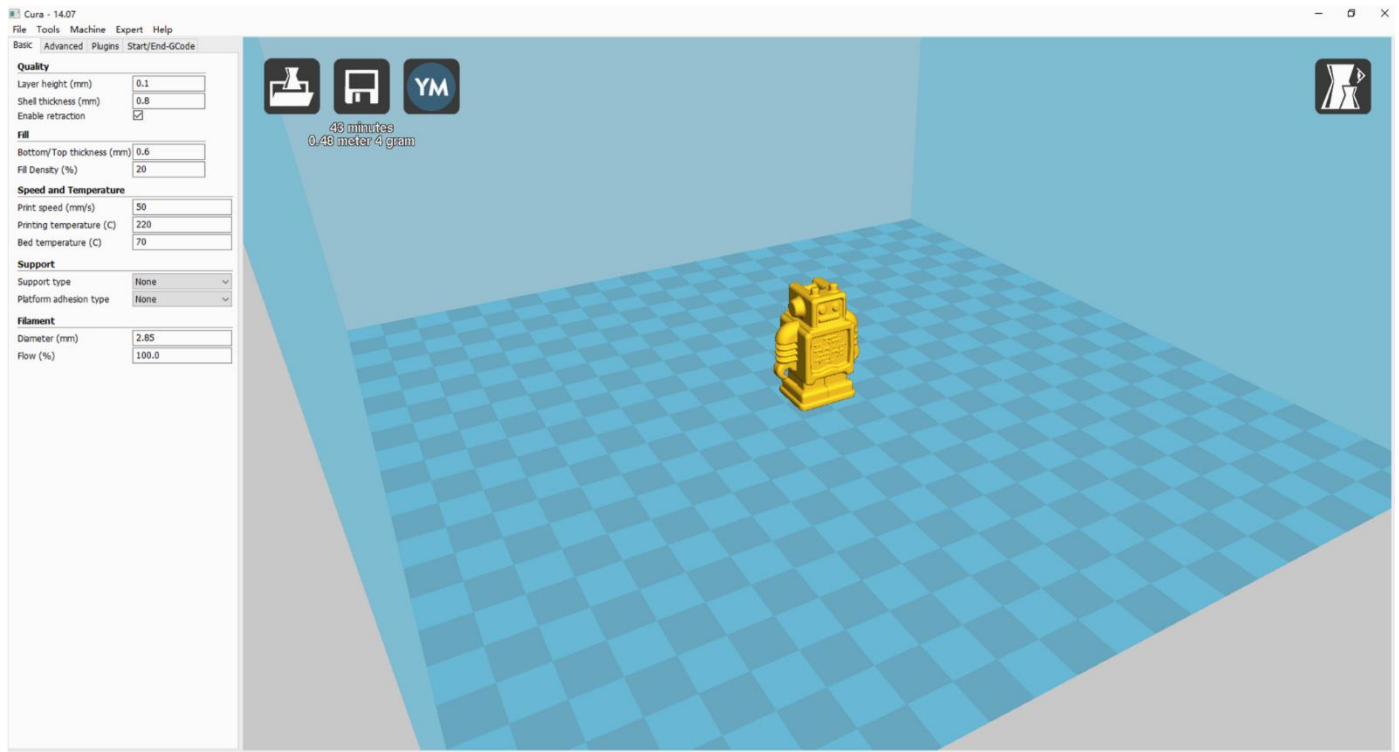
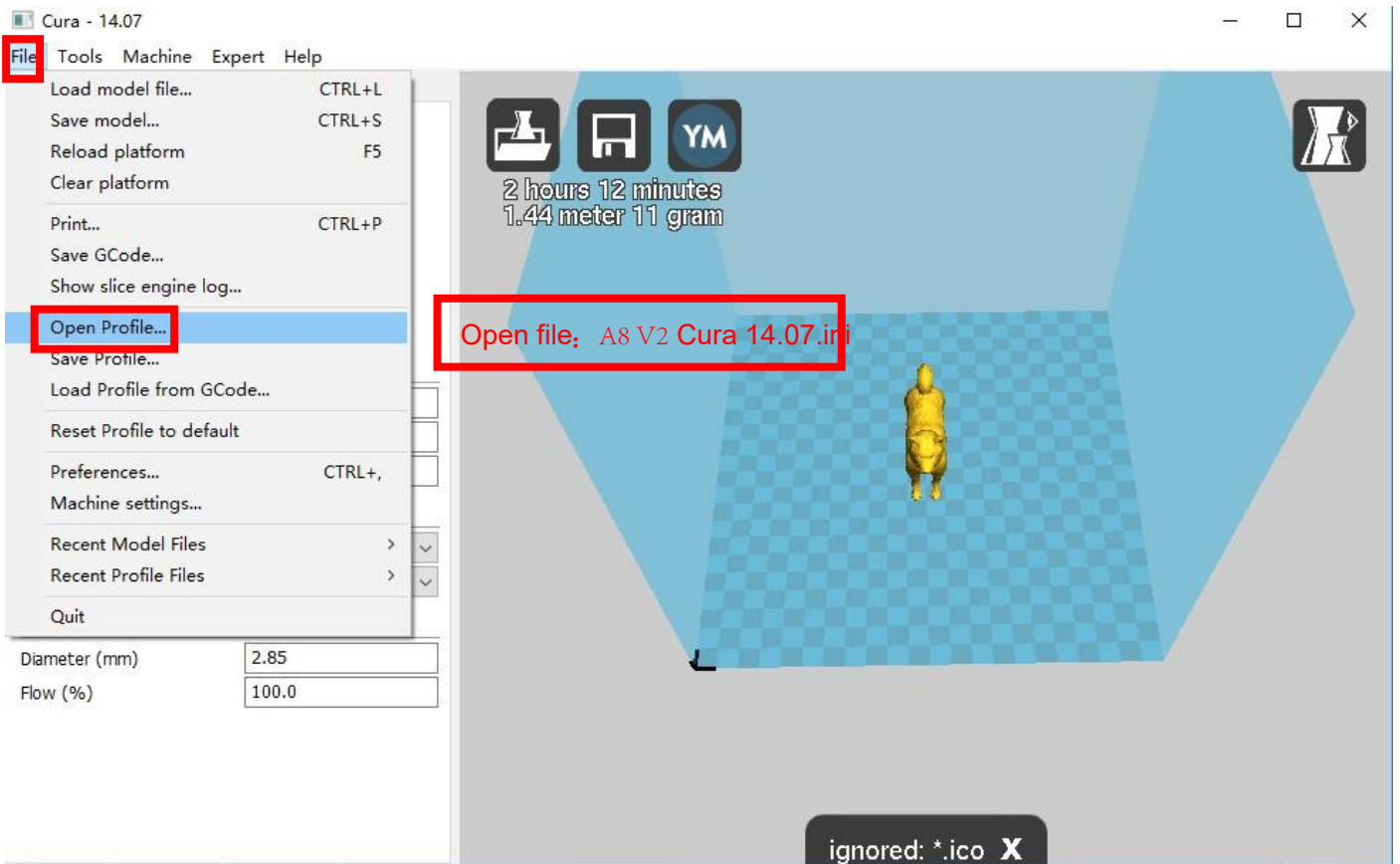Now you have finished the installation. Next , enter Cura .
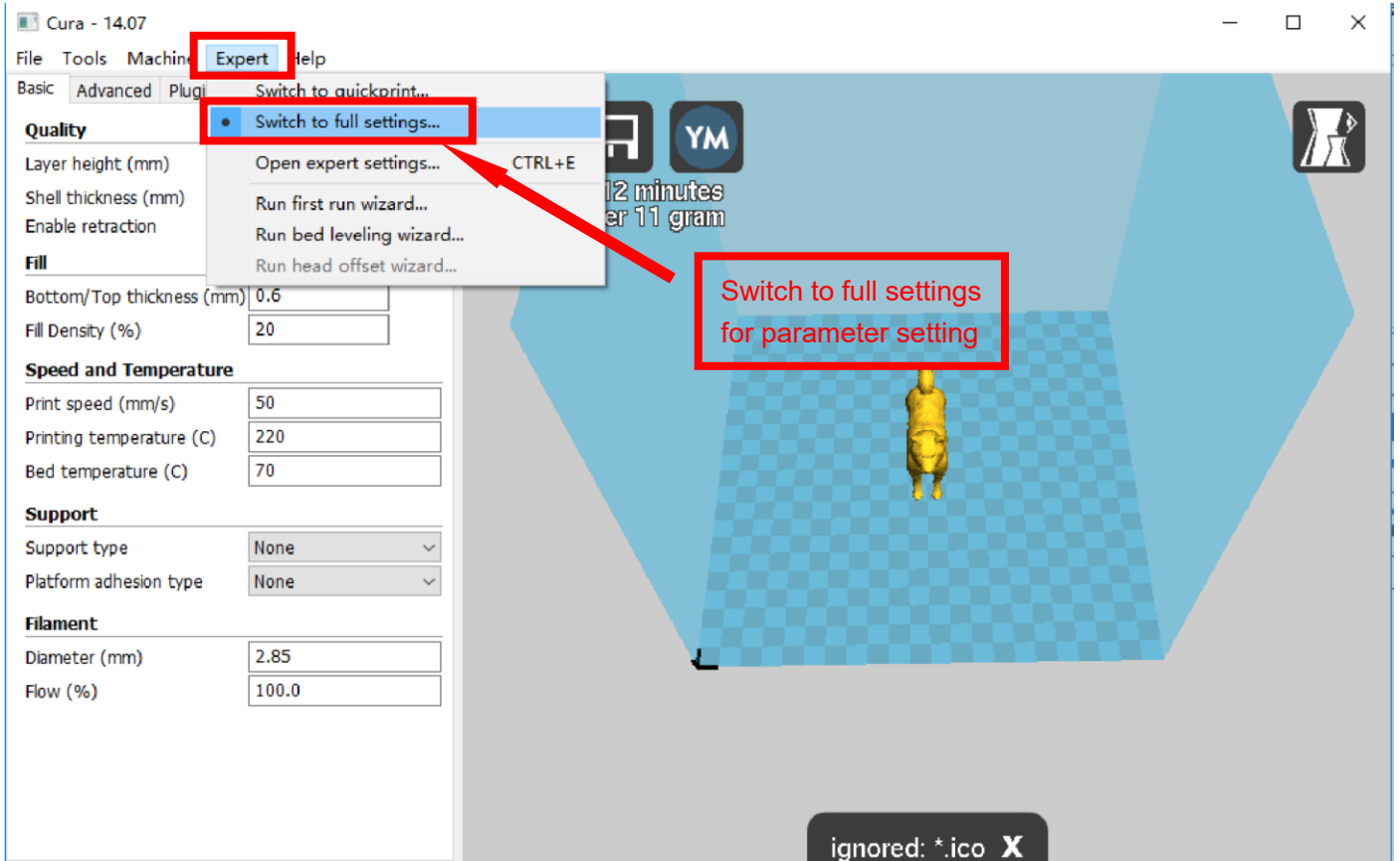
2. Cura Setting

2.1 Clear platform

Delete the dog. Two ways for you :

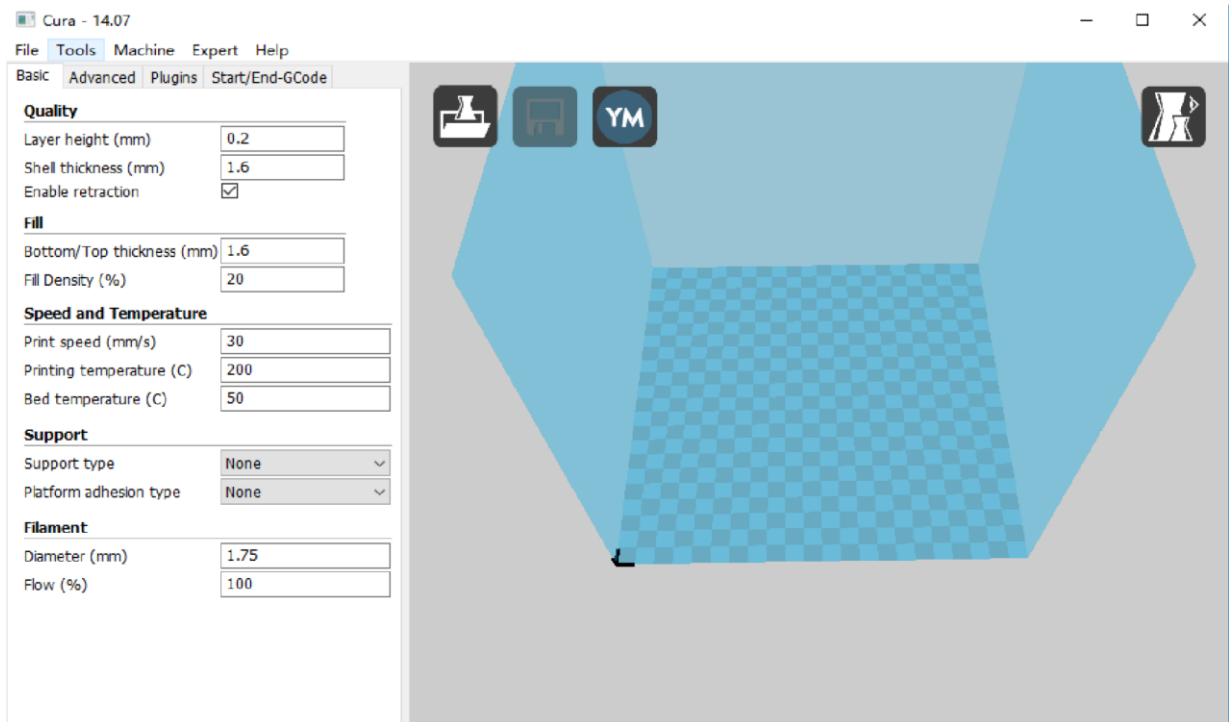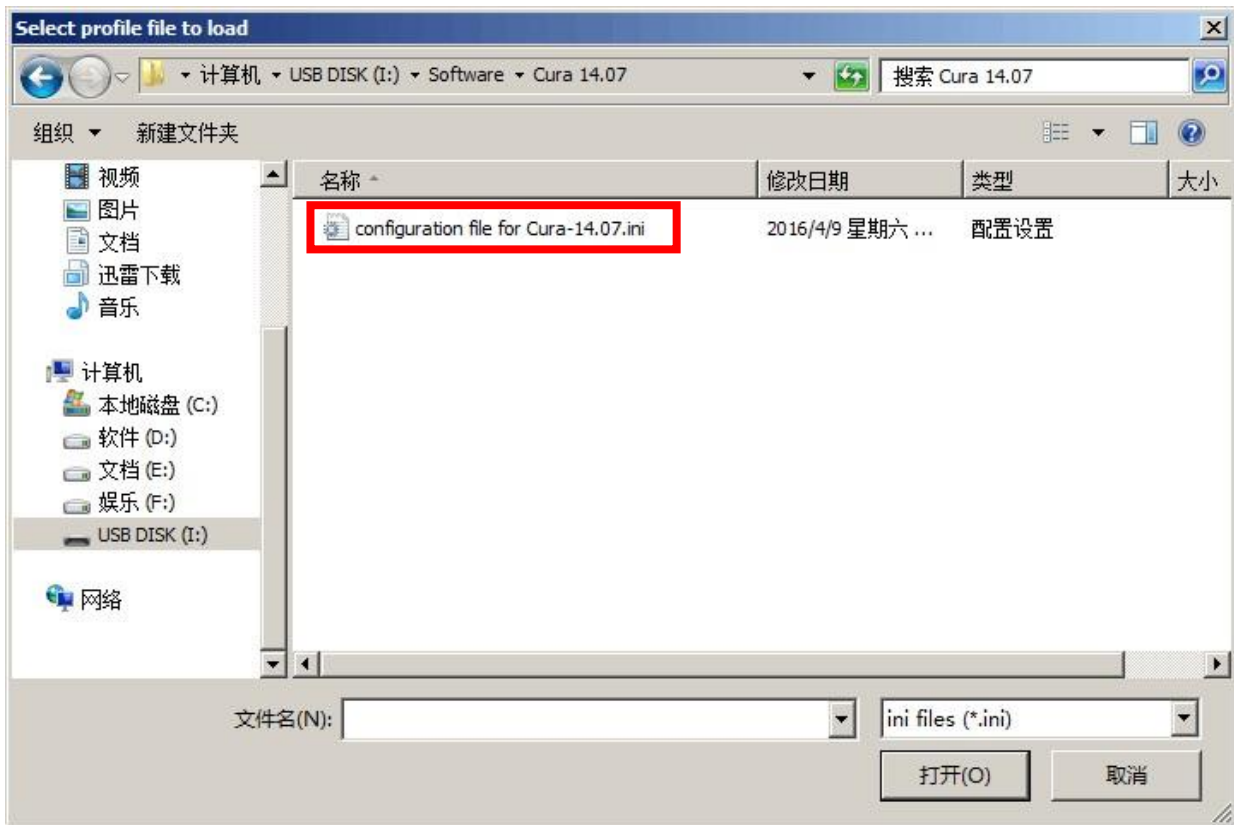1.Move mouse to dog ,right click, click "delete object".
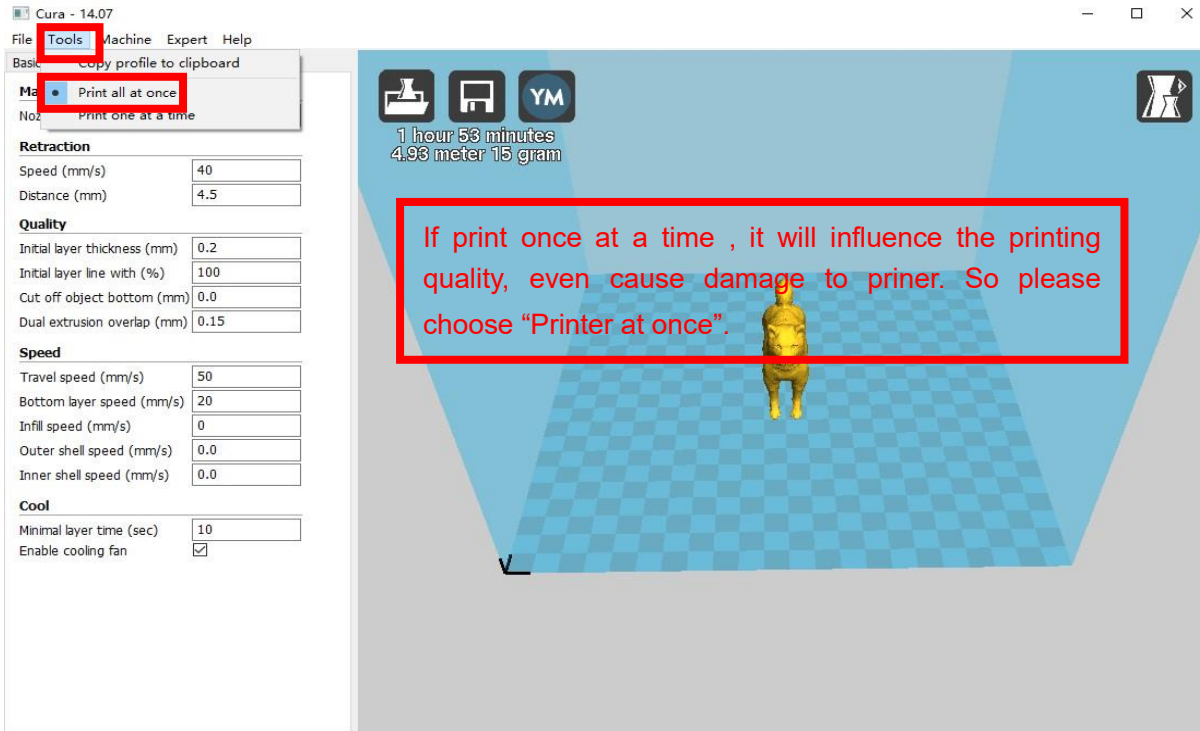2.Left click "File" , choose "Clear platform".

Cura - 14.07

File Tools Machine Expert Help

Basic Advanced Plugi Switch to quickprint...

Quality

• Switch to full settings...

Layer height (mm) Open expert settings... CTRL+E

Shell thickness (mm)

Enable retraction Run first run wizard...

Fill Run bed leveling wizard...

Bottom/Top thickness (mm) 0.6 Run head offset wizard...

Fill Density (%) 20

Speed and Temperature

Print speed (mm/s) 50

Printing temperature (C) 220

Bed temperature (C) 70

Support

Support type None

Platform adhesion type None

Filament

Diameter (mm) 2.85

Flow (%) 100.0

Switch to full settings
for parameter setting

ignored: *.ico X

Cura - 14.07

File Tools Machine Expert Help

Load model file... CTRL+L

Save model... CTRL+S

Reload platform F5

Clear platform

Print... CTRL+P

Save GCode...

Show slice engine log...

Open Profile...

Save Profile...

Load Profile from GCode...

Reset Profile to default

Preferences... CTRL+,

Machine settings...

Recent Model Files >

Recent Profile Files >

Quit

Diameter (mm) 2.85

Flow (%) 100.0

2 hours 12 minutes
1.44 meter 11 gram

Open file：A8 V2 Cura 14.07.ini

ignored: *.ico X

Position of configuration file: Computer/TF card)/ configuration file for cura-14.07

（suggestion :keep this file copy to your computer）

Cura - 14.07

File Tools Machine Expert Help

Copy profile to clipboard

Basic

● Print all at once

Ma

Noz   Print one at a time

Retraction

| Speed (mm/s) | 40 |
| Distance (mm) | 4.5 |

Quality

Initial layer thickness (mm)	0.2
Initial layer line with (%)	100
Cut off object bottom (mm)	0.0
Dual extrusion overlap (mm)	0.15

Speed

Travel speed (mm/s)	50
Bottom layer speed (mm/s)	20
Infill speed (mm/s)	0
Outer shell speed (mm/s)	0.0
Inner shell speed (mm/s)	0.0

Cool

| Minimal layer time (sec) | 10 |
| Enable cooling fan | ☑ |

1 hour 53 minutes
4.93 meter 15 gram

YM

If print once at a time , it will influence the printing quality, even cause damage to priner. So please choose "Printer at once".

2.2 Layer height settings

Layer height：0.1mm cost long time but have the best printing precision. 0.2mm cost half time compared to 0.1mm，but have general printing precision. 0.3 cost less time with not good precision. It defaults 0.2mm.
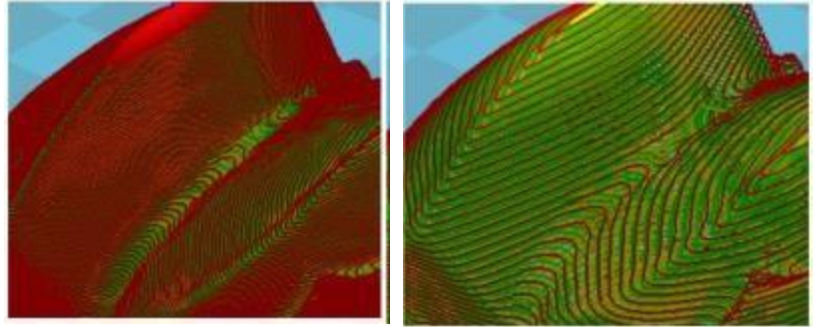
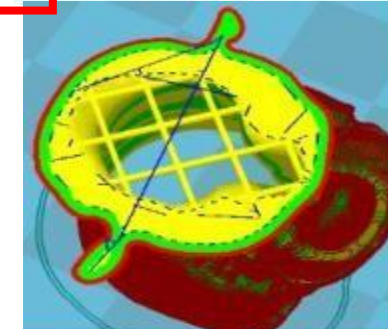Left：0.1mm Layer height

Right：0.2mm Layer height

Layer height setting
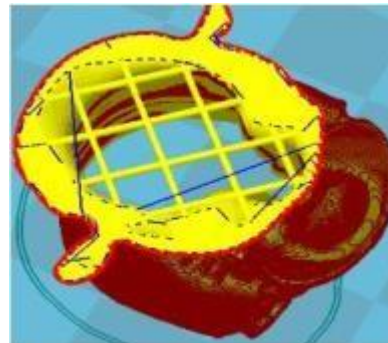
0.8mm

1.2mm

2mm

Shell thickness setting

0.8mm is too thin for shell, 2mm shell costs more time，1.2mm is relatively better. Please use the integer mutiple of nozzle diameter.

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Cura - 14.07

File Tools Machine Expert Help

Basic Advanced Plugins Start/End-GCode

Quality
Layer height (mm)	0.2
Shell thickness (mm)	1.2
Enable retraction	☑

Fill
Bottom/Top thickness (mm)	1.2
Fill Density (%)	20

Speed and Temperature
Print speed (mm/s)	30
Printing temperature (C)	200
Bed temperature (C)	50

Support
Support type	None
Platform adhesion type	None

Filament
Diameter (mm)	1.75
Flow (%)	100

Enable retraction to avoid filaments leakage when nozzles move in empty area

The Blue line is the leak filament

Enable retraction

Cura - 14.07

File Tools Machine Expert Help

Basic Advanced Plugins Start/End-GCode

Quality
Layer height (mm)	0.2
Shell thickness (mm)	1.2
Enable retraction	☑

Fill
Bottom/Top thickness (mm)	1.2
Fill Density (%)	20

Speed and Temperature
Print speed (mm/s)	30
Printing temperature (C)	200
Bed temperature (C)	50

Support
Support type	None
Platform adhesion type	None

Filament
Diameter (mm)	1.75
Flow (%)	100

When fill density is less than 20%, it's easy for 0.6mm thickness to cause hollow on the top. 1.2mm normally won't have this issue.

Bottom/Top thickness: 1.2mm

Under the same fill density

Bottom/Top thickness: 0.6mm

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Cura - 14.07

File Tools Machine Expert Help

Basic Advanced Plugins Start/End-GCode

Quality
Layer height (mm)   0.2
Shell thickness (mm)   1.2
Enable retraction   ☑

Fill
Bottom/Top thickness (mm) 1.2
Fill Density (%)   20

Speed and Temperature
Print speed (mm/s)   30
Printing temperature (C)   200
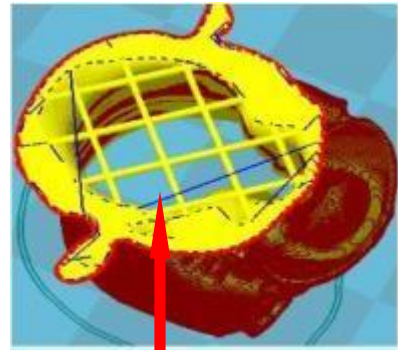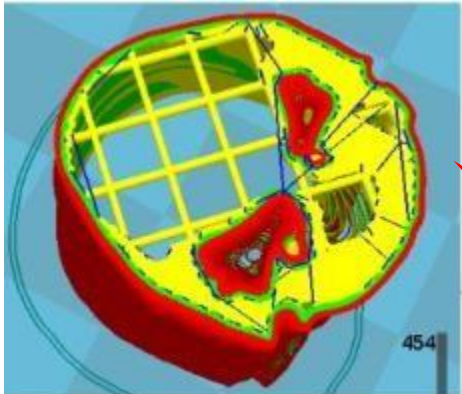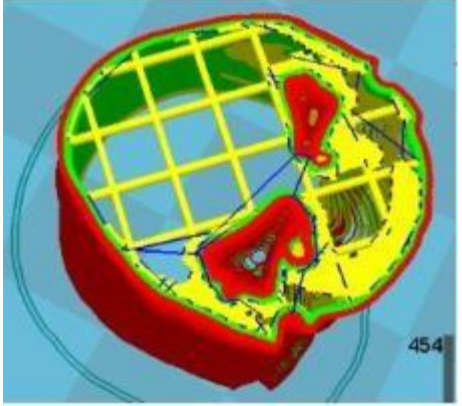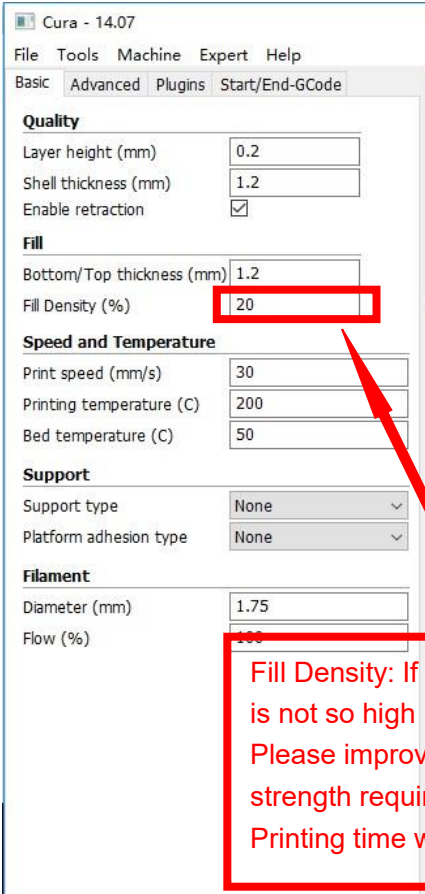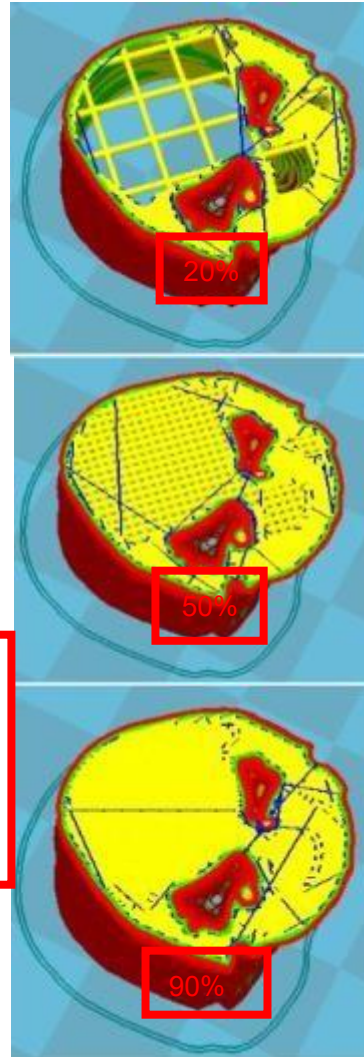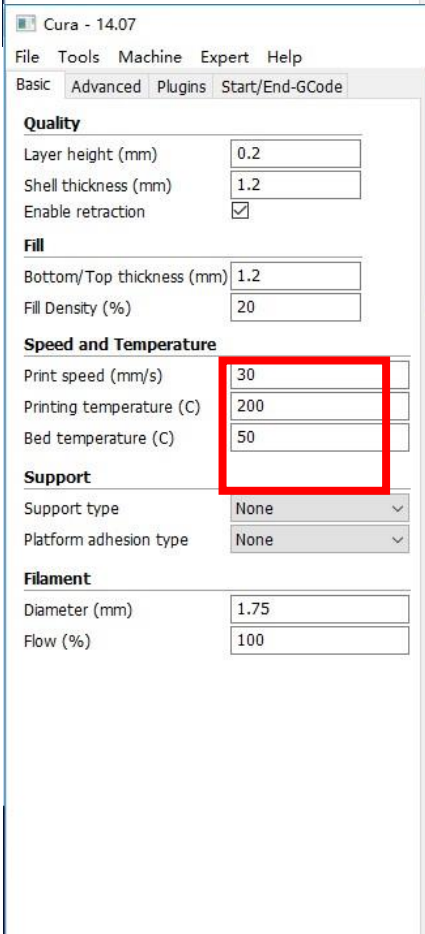Bed temperature (C)   50

Support
Support type   None
Platform adhesion type   None

Filament
Diameter (mm)   1.75
Flow (%)   100

Fill Density
Setting

20%

50%

90%

Fill Density: If strength requirement is not so high , set 10% is ok. Please improve fill density when strength requirement gets higher. Printing time will go up as well.

Cura - 14.07

File Tools Machine Expert Help

Basic Advanced Plugins Start/End-GCode

Quality
Layer height (mm)   0.2
Shell thickness (mm)   1.2
Enable retraction   ☑

Fill
Bottom/Top thickness (mm) 1.2
Fill Density (%)   20

Speed and Temperature
Print speed (mm/s)   30
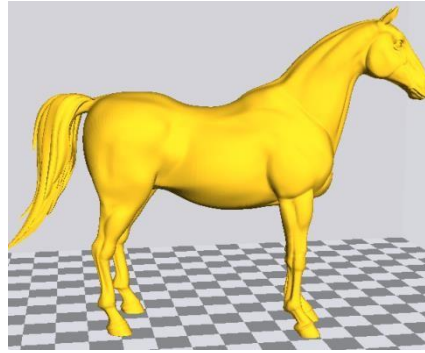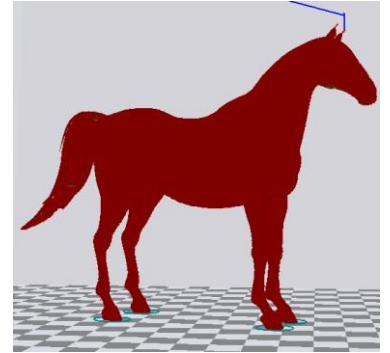Printing temperature (C)   200
Bed temperature (C)   50

Support
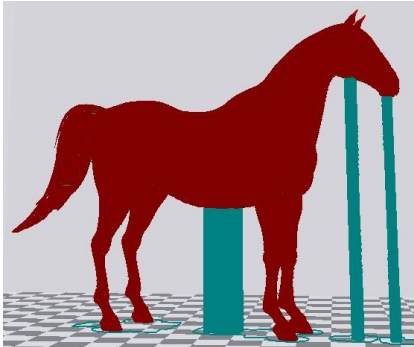Support type   None
Platform adhesion type   None

Filament
Diameter (mm)   1.75
Flow (%)   100

Printing Speed setting

This is default speed. If other settings aren't changed, it prints more accurately while the printing process takes more time.
High printing speed takes less time while it cannot print accurately , making the model have bad quality.
Normally 40-60 print speed is suitable for printing.

Pringting Temperature

PLA filament temperature setting: nozzle: 190-210 °C   hotbed: 40-60°C

ABS filament temperature setting: nozzle: 230-250°C   hotbed: 60-90°C

Cura - 14.07

File Tools Machine Expert Help

Basic | Advanced | Plugins | Start/End-GCode

Quality

Layer height (mm)	0.2
Shell thickness (mm)	1.2
Enable retraction	☑

Fill

Bottom/Top thickness (mm)	1.2
Fill Density (%)	20

Speed and Temperature

Print speed (mm/s)	30
Printing temperature (C)	200
Bed temperature (C)	50

Support

Support type	None
	None
	Touching buildplate
	Everywhere
Platform adhesion type	

Filament

Diameter (mm)	1.75
Flow (%)	100

Support type setting

Original Model

Support type: None

Support type: Touching
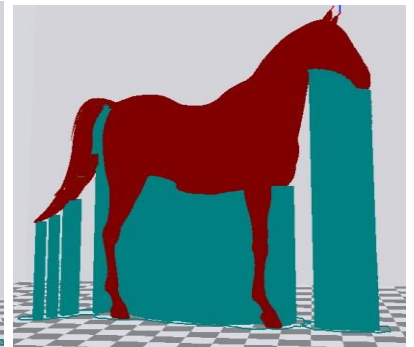
Support type: Everywhere

Attention: Normally we add support to complex model or model with vacant parts. It may have influence on the surface if you choose everywhere. You'd better circle around the model and try to avoid unnecessary support.

Cura - 14.07

File   Tools   Machine   Expert   Help

Basic | Advanced | Plugins | Start/End-GCode

Quality

Layer height (mm)	0.2
Shell thickness (mm)	1.2
Enable retraction	☑

Fill

Bottom/Top thickness (mm)	1.2
Fill Density (%)	20

Speed and Temperature

Print speed (mm/s)	30
Printing temperature (C)	200
Bed temperature (C)	50

Support

Support type	None
Platform adhesion type	None

None
Brim
Raft

Filament

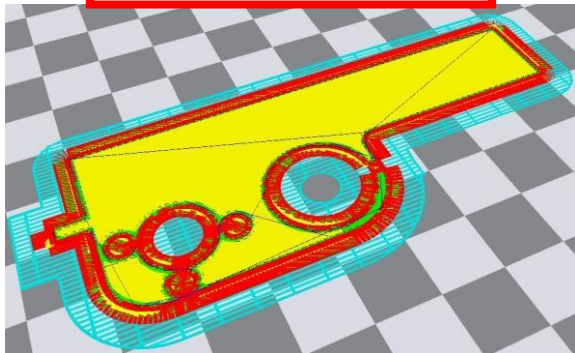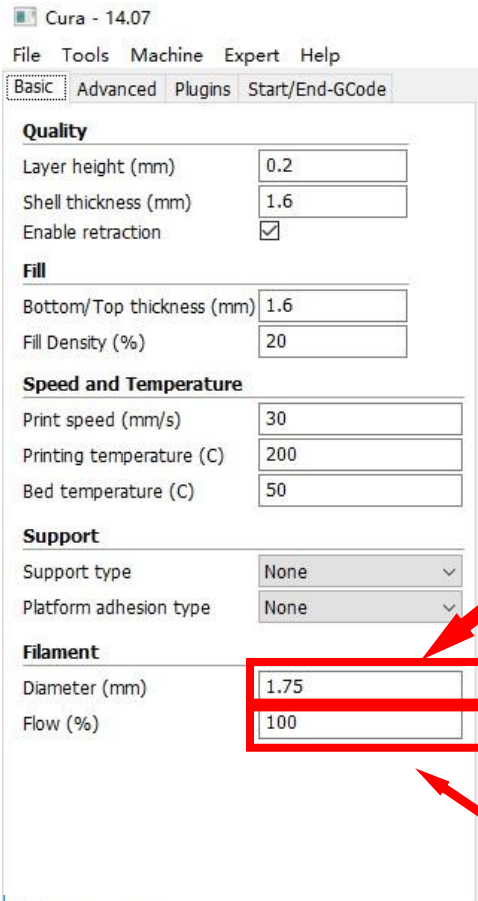|	
Diameter (mm)	
Flow (%)	100

Support setting
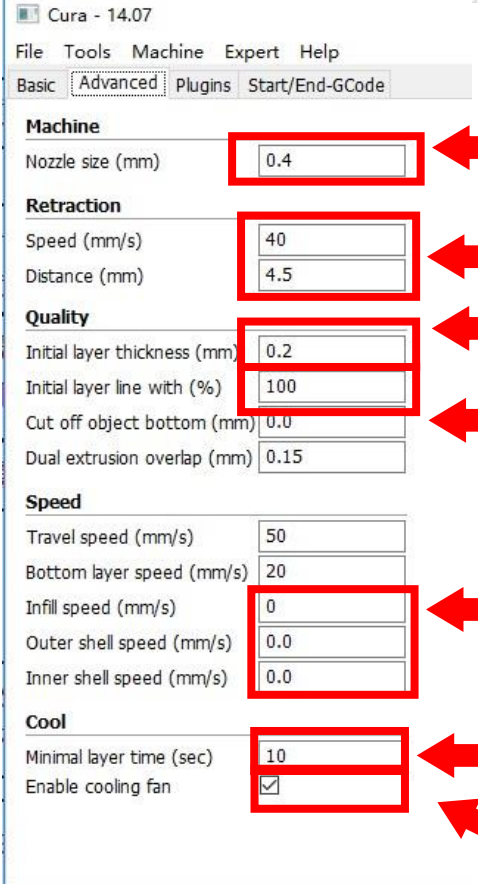
None: no support
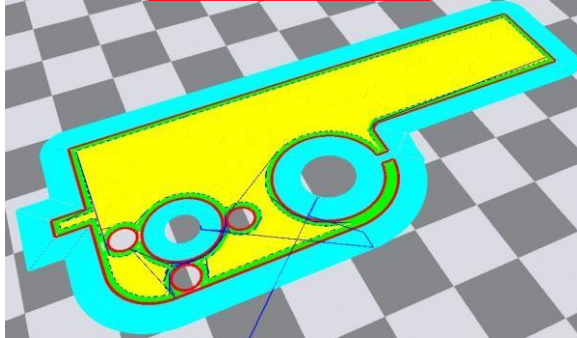
Brim:Touch with the adge

Raft: Totally touch with the bottom

Attention: please choose None if the printing platform is ready and the high temperature adhesive tape is good. Please choose Brim when the model is small . Choosing Raft makes it difficult to seperate model from the platform

Cura - 14.07

File Tools Machine Expert Help

Basic | Advanced | Plugins | Start/End-GCode

Quality

Layer height (mm)	0.2
Shell thickness (mm)	1.6
Enable retraction	☑

Fill

Bottom/Top thickness (mm)	1.6
Fill Density (%)	20

Speed and Temperature

Print speed (mm/s)	30
Printing temperature (C)	200
Bed temperature (C)	50

Support

Support type	None
Platform adhesion type	None

Filament

Diameter (mm)	1.75
Flow (%)	100

Attention: A8 V2 use 1.75mm filament

Attention:
Flow is proportion of filament , we suggest to use 100
Increasing flow & decrease diameter has the similar effect.
Model surface gets many bumps when flow is too big;model frame gets flimsy if flow is too small.

Cura - 14.07

File Tools Machine Expert Help

Basic | **Advanced** | Plugins | Start/End-GCode

Machine

Nozzle size (mm)	0.4

Retraction

Speed (mm/s)	40
Distance (mm)	4.5

Quality

Initial layer thickness (mm)	0.2
Initial layer line with (%)	100
Cut off object bottom (mm)	0.0
Dual extrusion overlap (mm)	0.15

Speed

Travel speed (mm/s)	50
Bottom layer speed (mm/s)	20
Infill speed (mm/s)	0
Outer shell speed (mm/s)	0.0
Inner shell speed (mm/s)	0.0

Cool

Minimal layer time (sec)	10
Enable cooling fan	☑

We suggest not to change it , A8 default 0.4mm

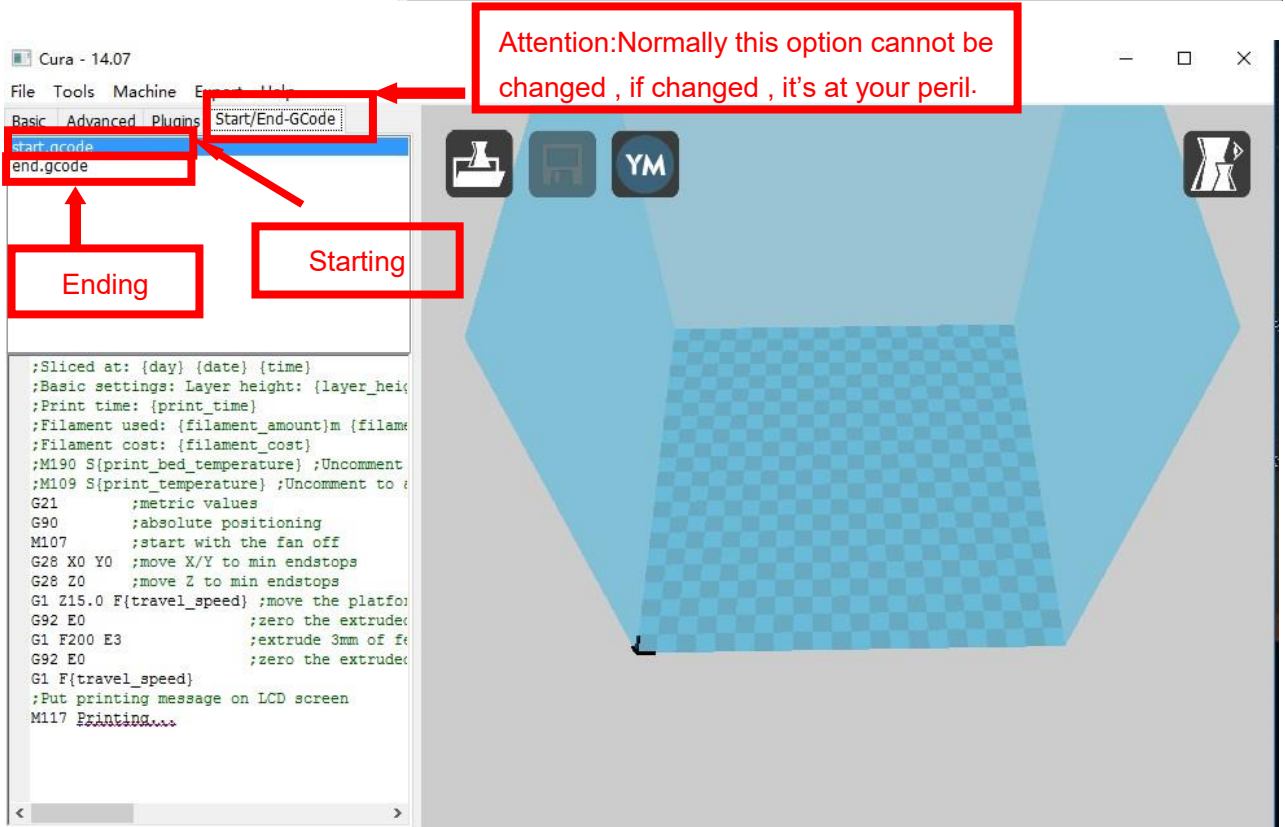We suggest not to change it , or use the date in the picture
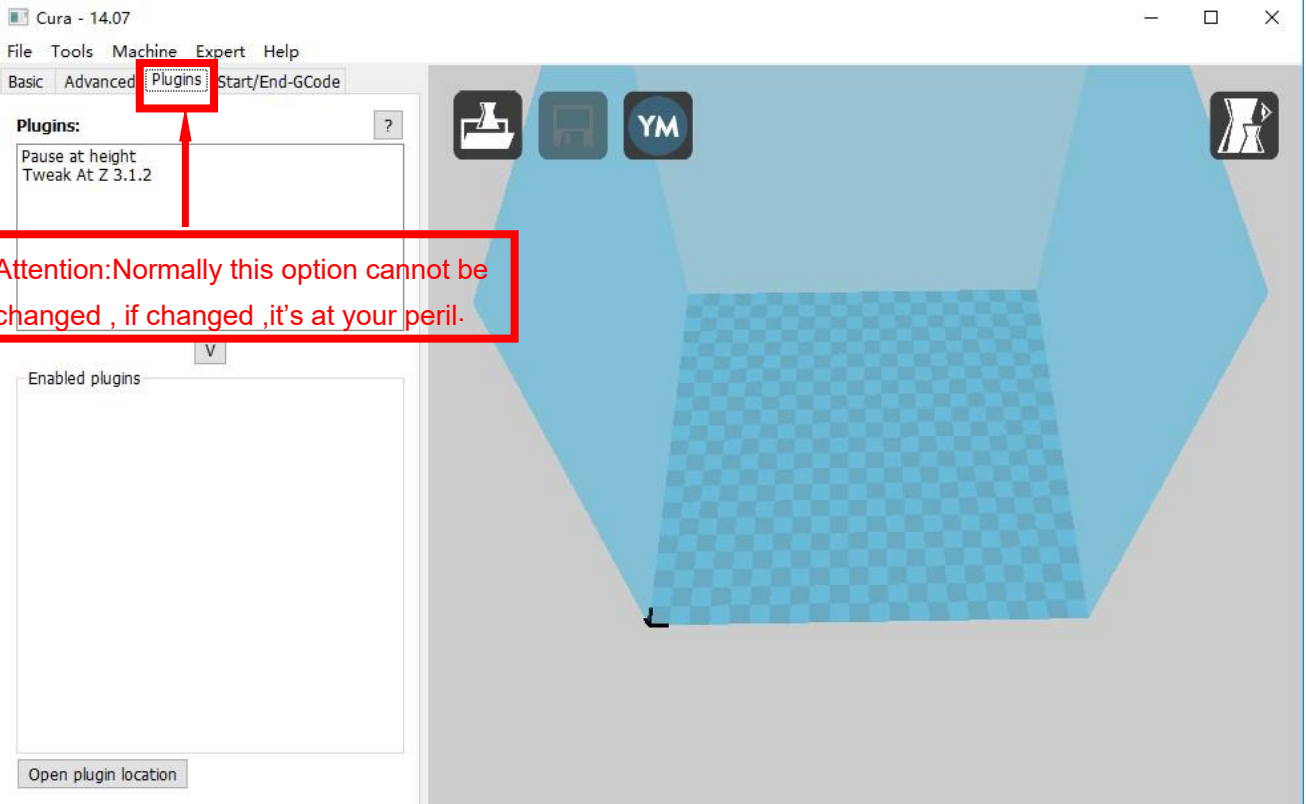
We suggest 0.2mm to avoid initial layer tilt,0.3mm is more easy to seperate from the platform.
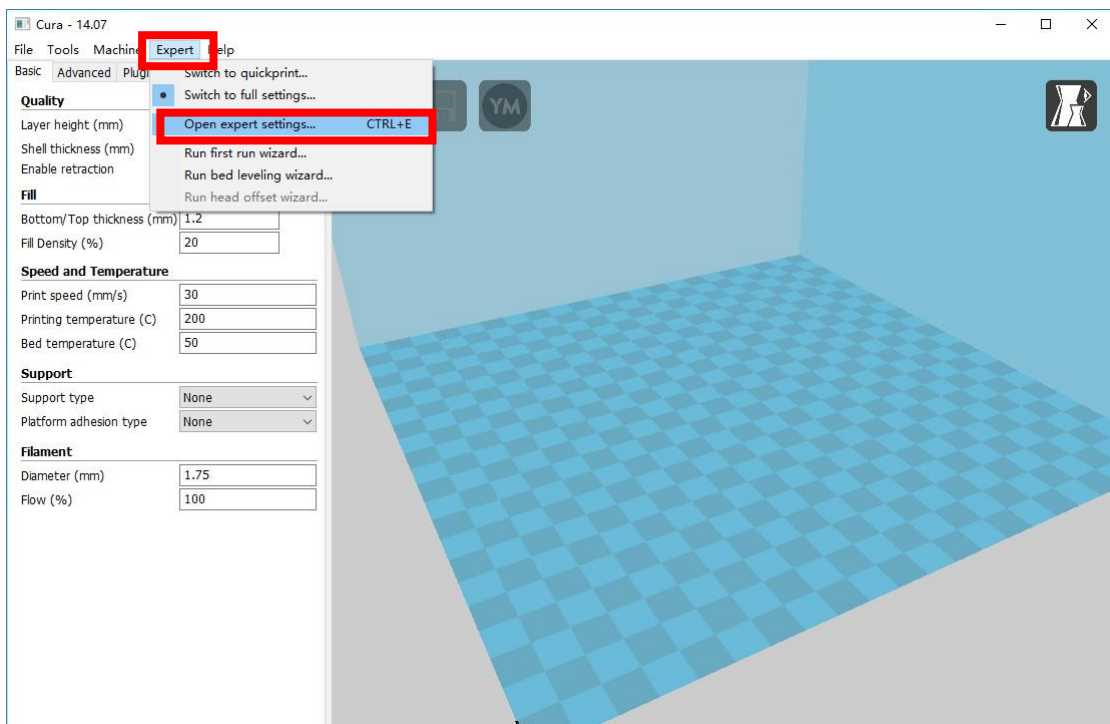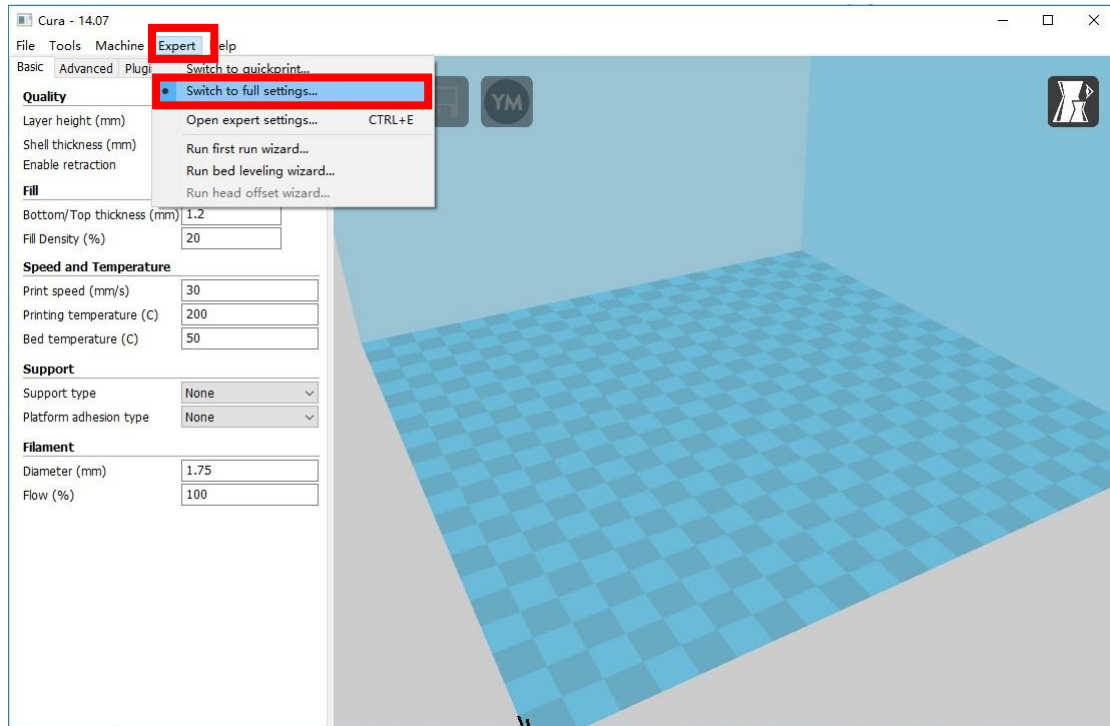
Initial layer line proportion
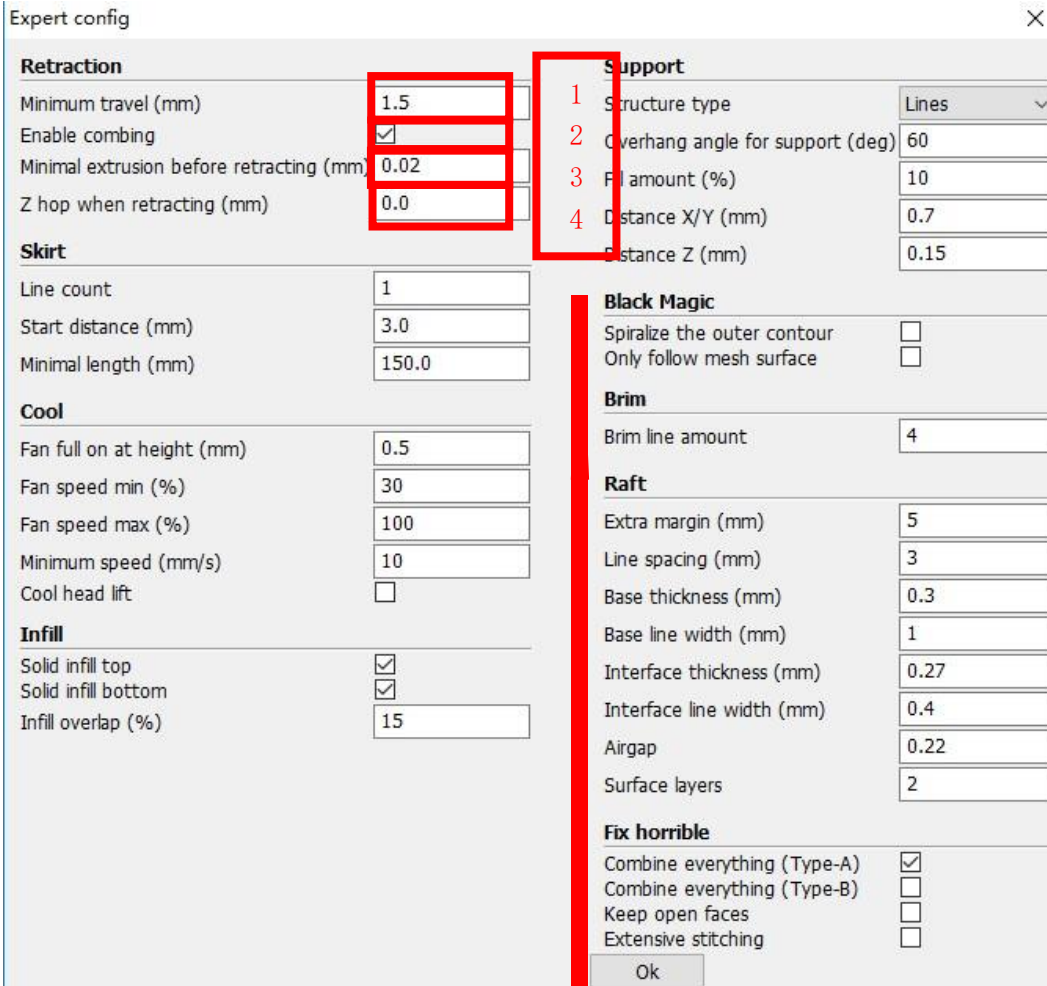
"0" means using default speed

Min printing time for each layer. When the time is less than 10 , it prints slower. It's better to decrease time when printing thin and long models.
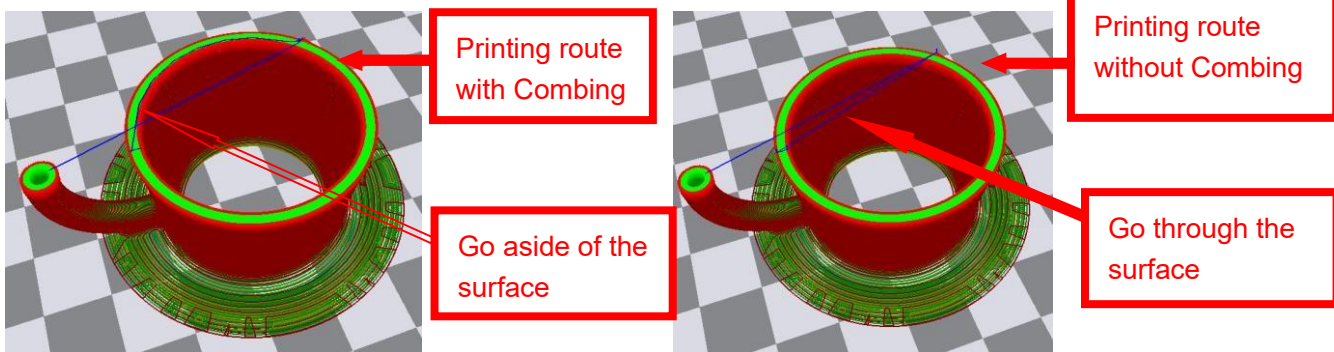
We suggest not choose this when printing ABS.

Cura - 14.07

File Tools Machine Expert Help

Basic Advanced [Plugins] Start/End-GCode

Plugins: [?]

Pause at height
Tweak At Z 3.1.2

Attention:Normally this option cannot be changed , if changed ,it's at your peril·

[V]

Enabled plugins

[Open plugin location]

Attention:Normally this option cannot be changed , if changed , it's at your peril·

Cura - 14.07

File Tools Machine Expert Help

Basic Advanced Plugins [Start/End-GCode]

start.gcode
end.gcode

Ending

Starting

```
;Sliced at: {day} {date} {time}
;Basic settings: Layer height: {layer_heig
;Print time: {print_time}
;Filament used: {filament_amount}m {filame
;Filament cost: {filament_cost}
;M190 S{print_bed_temperature} ;Uncomment
;M109 S{print_temperature} ;Uncomment to a
G21          ;metric values
G90          ;absolute positioning
M107         ;start with the fan off
G28 X0 Y0    ;move X/Y to min endstops
G28 Z0       ;move Z to min endstops
G1 Z15.0 F{travel_speed} ;move the platfor
G92 E0                   ;zero the extrude
G1 F200 E3              ;extrude 3mm of fe
G92 E0                  ;zero the extrude
G1 F{travel_speed}
;Put printing message on LCD screen
M117 Printing...
```

2.3 Expert Setting

Expert config

Retraction

Minimum travel (mm)	1.5
Enable combing	☑
Minimal extrusion before retracting (mm)	0.02
Z hop when retracting (mm)	0.0

Skirt

Line count	1
Start distance (mm)	3.0
Minimal length (mm)	150.0

Cool

Fan full on at height (mm)	0.5
Fan speed min (%)	30
Fan speed max (%)	100
Minimum speed (mm/s)	10
Cool head lift	☐

Infill

Solid infill top	☑
Solid infill bottom	☑
Infill overlap (%)	15

Support

Structure type	Lines
Overhang angle for support (deg)	60
Fill amount (%)	10
Distance X/Y (mm)	0.7
Distance Z (mm)	0.15

Black Magic

Spiralize the outer contour	☐
Only follow mesh surface	☐

Brim

Brim line amount	4

Raft

Extra margin (mm)	5
Line spacing (mm)	3
Base thickness (mm)	0.3
Base line width (mm)	1
Interface thickness (mm)	0.27
Interface line width (mm)	0.4
Airgap	0.22
Surface layers	2

Fix horrible

Combine everything (Type-A)	☑
Combine everything (Type-B)	☐
Keep open faces	☐
Extensive stitching	☐

Ok

1. The minimum length before retraction . Used to avoid frequent retraction. No need to change.
2. Enable Combing: Digital for surface quality , the nozzle will try not to go through surface , that's why Cura is better than Slic3r.
3. Minimum extrusion length , to avoid frequent extrusion.
4. The height extruder rise in the retraction . If you need to set this option , 2mm is suitable .

Printing route with Combing

Go aside of the surface

Printing route without Combing

Go through the surface

Expert config

Retraction

Minimum travel (mm)	1.5
Enable combing	☑
Minimal extrusion before retracting (mm)	0.02
Z hop when retracting (mm)	0.0

Skirt

Line count	1
Start distance (mm)	3.0
Minimal length (mm)	150.0

Cool

Fan full on at height (mm)	0.5
Fan speed min (%)	30
Fan speed max (%)	100
Minimum speed (mm/s)	10
Cool head lift	☐

Infill

Solid infill top	☑
Solid infill bottom	☑
Infill overlap (%)	15

Support

Structure type	Lines
Overhang angle for support (deg)	60
Fill amount (%)	10
Distance X/Y (mm)	0.7
Distance Z (mm)	0.15

Black Magic

Spiralize the outer contour	☐
Only follow mesh surface	☐

Brim

Brim line amount	4

Raft

Extra margin (mm)	5
Line spacing (mm)	3
Base thickness (mm)	0.3
Base line width (mm)	1
Interface thickness (mm)	0.27
Interface line width (mm)	0.4
Airgap	0.22
Surface layers	2

Fix horrible

Combine everything (Type-A)	☑
Combine everything (Type-B)	☐
Keep open faces	☐
Extensive stitching	☐

Ok

Skirt is to avoid extruder unfilled before printing , and it appears only when platform attachment type is None. Normally "1" is ok . Change it to "0" when your model reaches the maximum size , or the printing size will be too big.
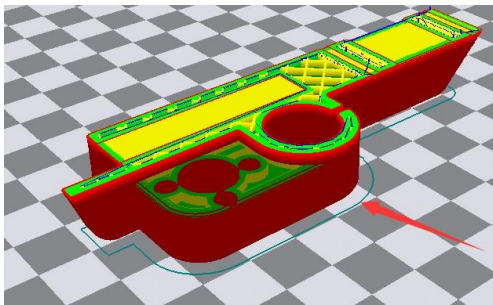
Peripheral line quantity: 1
Start distance: 3
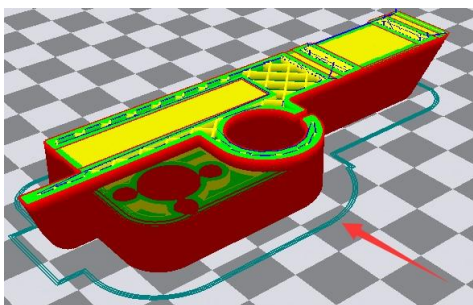
Peripheral line quantity: 1
Start distance: 3

Expert config   ×

Retraction

Minimum travel (mm)	1.5
Enable combing	☑
Minimal extrusion before retracting (mm)	0.02
Z hop when retracting (mm)	0.0

Skirt

Line count	1
Start distance (mm)	3.0
Minimal length (mm)	150.0

Cool

Fan full on at height (mm)	0.5
Fan speed min (%)	30
Fan speed max (%)	100
Minimum speed (mm/s)	10
Cool head lift	☐

Infill

Solid infill top	☑
Solid infill bottom	☑
Infill overlap (%)	15

Support

Structure type	Lines
Overhang angle for support (deg)	60
Fill amount (%)	10
Distance X/Y (mm)	0.7
Distance Z (mm)	0.15

Black Magic

Spiralize the outer contour	☐
Only follow mesh surface	☐

Brim

Brim line amount	4

Raft

Extra margin (mm)	5
Line spacing (mm)	3
Base thickness (mm)	0.3
Base line width (mm)	1
Interface thickness (mm)	0.27
Interface line width (mm)	0.4
Airgap	0.22
Surface layers	2

Fix horrible

Combine everything (Type-A)	☑
Combine everything (Type-B)	☐
Keep open faces	☐
Extensive stitching	☐

Ok

1. To ensure the attachment of model to platform , fan won't start at the beginning.

2-4. Fan speed min & max : If they are not equal , the soft ware will choose a suitable speed during them.

5. Condition to choose cool head lift : When it's printing with the minimum speed but still cannot reach the minimum time , you need to choose cool head lift . But it may cause filament leak.

Expert config   ✕

Retraction		Support	
Minimum travel (mm)	1.5	Structure type	Lines ⌄
Enable combing	☑	Overhang angle for support (deg)	60
Minimal extrusion before retracting (mm)	0.02	Fill amount (%)	10
Z hop when retracting (mm)	0.0	Distance X/Y (mm)	0.7
		Distance Z (mm)	0.15

Skirt		Black Magic	
Line count	1	Spiralize the outer contour	☐
Start distance (mm)	3.0	Only follow mesh surface	☐
Minimal length (mm)	150.0		

Cool		Brim	
Fan full on at height (mm)	0.5	Brim line amount	4

		Raft	
Fan speed min (%)	30	Extra margin (mm)	5
Fan speed max (%)	100	Line spacing (mm)	3
Minimum speed (mm/s)	10	Base thickness (mm)	0.3
Cool head lift	☐	Base line width (mm)	1

Infill			
Solid infill top	☑	Interface thickness (mm)	0.27
Solid infill bottom	☑	Interface line width (mm)	0.4
Infill overlap (%)	15	Airgap	0.22
		Surface layers	2

Fix horrible	
Combine everything (Type-A)	☑
Combine everything (Type-B)	☐
Keep open faces	☐
Extensive stitching	☐

[Ok]

If no solid infill top , the only qualification is the   surface thickness .
Please check the detail below.
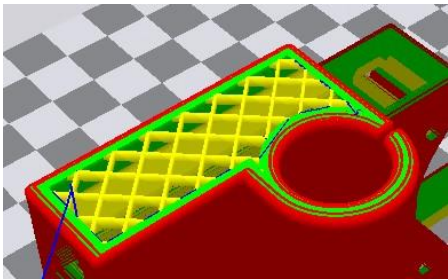
No solid infill top
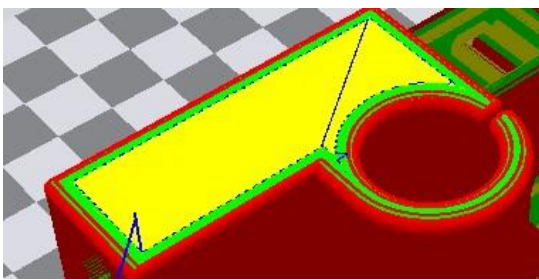
With solid infill top
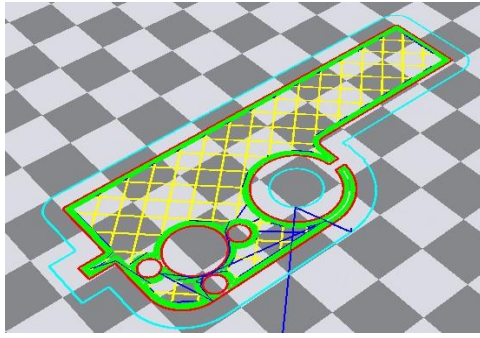
No solid infill bottom
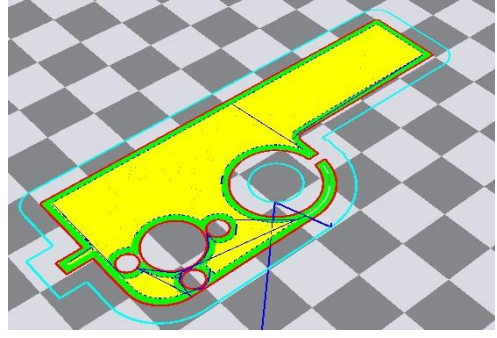
With solid infill bottom
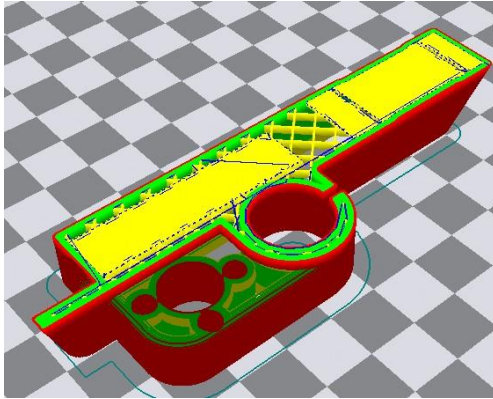
Infill coverlap: 20
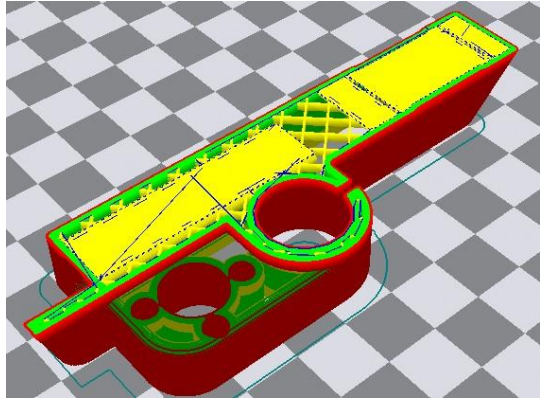
Infill coverlap: 40

Expert config

Retraction

Minimum travel (mm)	1.5
Enable combing	☑
Minimal extrusion before retracting (mm)	0.02
Z hop when retracting (mm)	0.0

Skirt

Line count	1
Start distance (mm)	3.0
Minimal length (mm)	150.0

Cool

Fan full on at height (mm)	0.5
Fan speed min (%)	30
Fan speed max (%)	100
Minimum speed (mm/s)	10
Cool head lift	☐

Infill

Solid infill top	☑
Solid infill bottom	☑
Infill overlap (%)	15

Support

Structure type	Lines
Overhang angle for support (deg)	60
Fill amount (%)	10
Distance X/Y (mm)	0.7
Distance Z (mm)	0.15

Black Magic

Spiralize the outer contour	☐
Only follow mesh surface	☐

Brim

Brim line amount	4

Raft

Extra margin (mm)	5
Line spacing (mm)	3
Base thickness (mm)	0.3
Base line width (mm)	1
Interface thickness (mm)	0.27
Interface line width (mm)	0.4
Airgap	0.22
Surface layers	2

Fix horrible

Combine everything (Type-A)	☑
Combine everything (Type-B)	☐
Keep open faces	☐
Extensive stitching	☐

Ok

Structure types:lines
Infill covertap: 15
Distance X/Y: 0.7
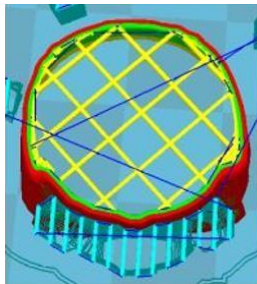
Structure types:lines
Infill covertap: 30
Distance X/Y: 0.7
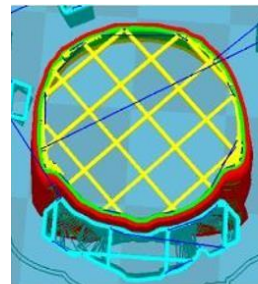
Structure types:grids
Infill covertap: 15
Distance X/Y: 0.7

These above are examples , you can set these options according to actual requirements. The biggest progress Cura has made is the kinds of support

structure types , making it easier to seperate from the model.

Expert config

Retraction

Minimum travel (mm)	1.5
Enable combing	☑
Minimal extrusion before retracting (mm)	0.02
Z hop when retracting (mm)	0.0

Skirt

Line count	1
Start distance (mm)	3.0
Minimal length (mm)	150.0

Cool

Fan full on at height (mm)	0.5
Fan speed min (%)	30
Fan speed max (%)	100
Minimum speed (mm/s)	10
Cool head lift	☐

Infill

Solid infill top	☑
Solid infill bottom	☑
Infill overlap (%)	15

Support

Structure type	Lines
Overhang angle for support (deg)	60
Fill amount (%)	10
Distance X/Y (mm)	0.7
Distance Z (mm)	0.15

Black Magic

Spiralize the outer contour	☐
Only follow mesh surface	☐

Brim

Brim line amount	4

Raft

Extra margin (mm)	5
Line spacing (mm)	3
Base thickness (mm)	0.3
Base line width (mm)	1
Interface thickness (mm)	0.27
Interface line width (mm)	0.4
Airgap	0.22
Surface layers	2

Fix horrible

Combine everything (Type-A)	☑
Combine everything (Type-B)	☐
Keep open faces	☐
Extensive stitching	☐

Ok

60°   45°   30°

It's difficult to seperate if the distance between support and the supported place is too   close;
The surface will be influenced if the distance is too far.

Different angle will generate different support , you can try the examples we provide   above which will have different effect.

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Expert config

Retraction

Minimum travel (mm)	1.5
Enable combing	☑
Minimal extrusion before retracting (mm)	0.02
Z hop when retracting (mm)	0.0

Skirt

Line count	1
Start distance (mm)	3.0
Minimal length (mm)	150.0

Cool

Fan full on at height (mm)	0.5
Fan speed min (%)	30
Fan speed max (%)	100
Minimum speed (mm/s)	10
Cool head lift	☐

Infill

Solid infill top	☑
Solid infill bottom	☑
Infill overlap (%)	15

Support

Structure type	Lines
Overhang angle for support (deg)	60
Fill amount (%)	10
Distance X/Y (mm)	0.7
Distance Z (mm)	0.15

Black Magic

Spiralize the outer contour	☐
Only follow mesh surface	☐

Brim

Brim line amount	4

Raft

Extra margin (mm)	5
Line spacing (mm)	3
Base thickness (mm)	0.3
Base line width (mm)	1
Interface thickness (mm)	0.27
Interface line width (mm)	0.4
Airgap	0.22
Surface layers	2

Fix horrible

Combine everything (Type-A)	☑
Combine everything (Type-B)	☐
Keep open faces	☐
Extensive stitching	☐

Ok

When choosing "Spiralize the outer contour" : Z axis rises while X,Y axis moves , and only a hollow bottom and a single layer of surface.
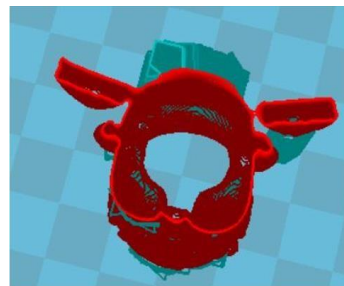
When choosing "Only follow mesh surface" : The nozzle prints along the surface.

Attention: The software defaults not open the option above , you'd better not turn it on .

Expert config

Retraction

Minimum travel (mm)	1.5
Enable combing	☑
Minimal extrusion before retracting (mm)	0.02
Z hop when retracting (mm)	0.0

Skirt

Line count	1
Start distance (mm)	3.0
Minimal length (mm)	150.0

Cool

Fan full on at height (mm)	0.5
Fan speed min (%)	30
Fan speed max (%)	100
Minimum speed (mm/s)	10
Cool head lift	☐

Infill

Solid infill top	☑
Solid infill bottom	☑
Infill overlap (%)	15

Support

Structure type	Lines
Overhang angle for support (deg)	60
Fill amount (%)	10
Distance X/Y (mm)	0.7
Distance Z (mm)	0.15

Black Magic

Spiralize the outer contour	☐
Only follow mesh surface	☐

Brim

Brim line amount	4

Raft

Extra margin (mm)	5
Line spacing (mm)	3
Base thickness (mm)	0.3
Base line width (mm)	1
Interface thickness (mm)	0.27
Interface line width (mm)	0.4
Airgap	0.22
Surface layers	2

Fix horrible

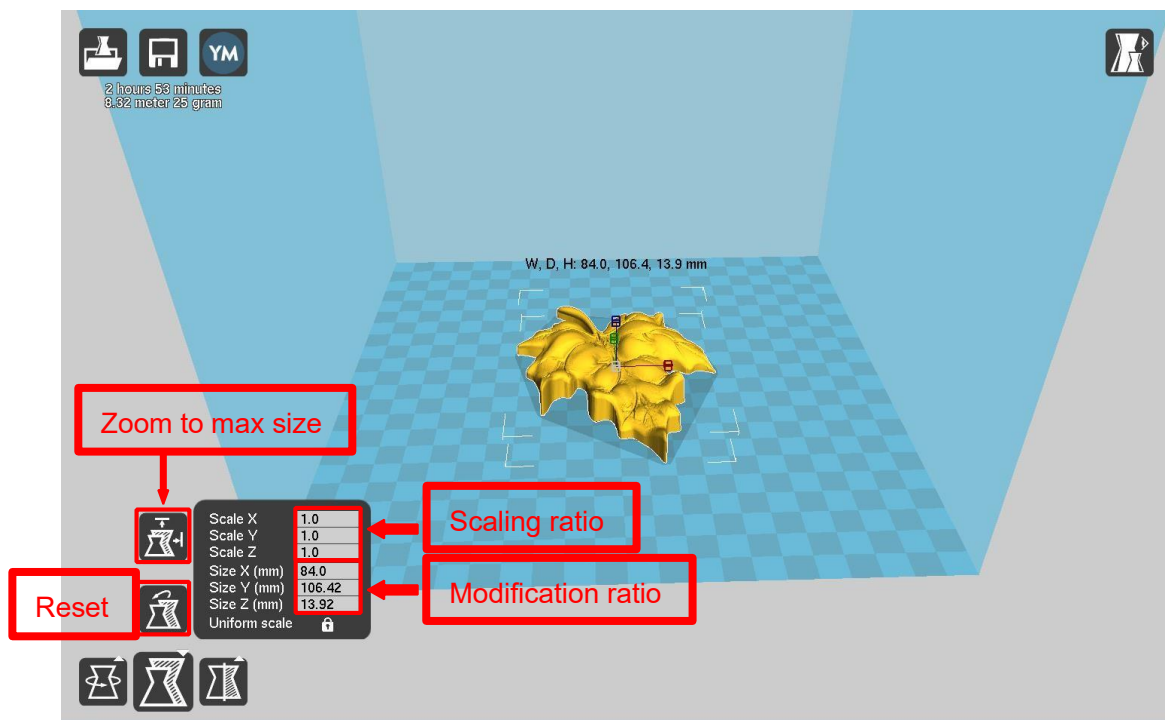|	
Combine everything (Type-A)	☑
Combine everything (Type-B)	☐
Keep open faces	☐
Extensive stitching	☐

[Ok]

Brim line amount: 10
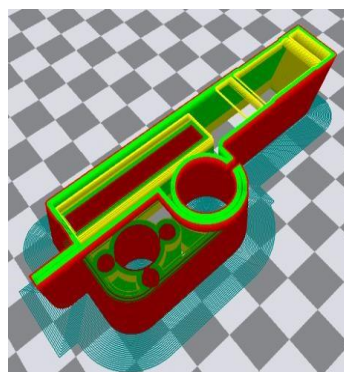
Brim line amount: 20

Guidance to use Brim if needed: Expert → Expert Settings → Support → Support Types → Birm.
The images above are only for reference , please set the parameter according to actual requirement.

Expert config   ✕

Retraction

Minimum travel (mm)	1.5
Enable combing	☑
Minimal extrusion before retracting (mm)	0.02
Z hop when retracting (mm)	0.0

Skirt

Line count	1
Start distance (mm)	3.0
Minimal length (mm)	150.0

Cool

Fan full on at height (mm)	0.5
Fan speed min (%)	30
Fan speed max (%)	100
Minimum speed (mm/s)	10
Cool head lift	☐

Infill

Solid infill top	☑
Solid infill bottom	☑
Infill overlap (%)	15

Support

Structure type	Lines ⌄
Overhang angle for support (deg)	60
Fill amount (%)	10
Distance X/Y (mm)	0.7
Distance Z (mm)	0.15

Black Magic

Spiralize the outer contour	☐
Only follow mesh surface	☐

Brim

Brim line amount	4

Raft

Extra margin (mm)	5
Line spacing (mm)	3
Base thickness (mm)	0.3
Base line width (mm)	1
Interface thickness (mm)	0.27
Interface line width (mm)	0.4
Airgap	0.22
Surface layers	2

Fix horrible

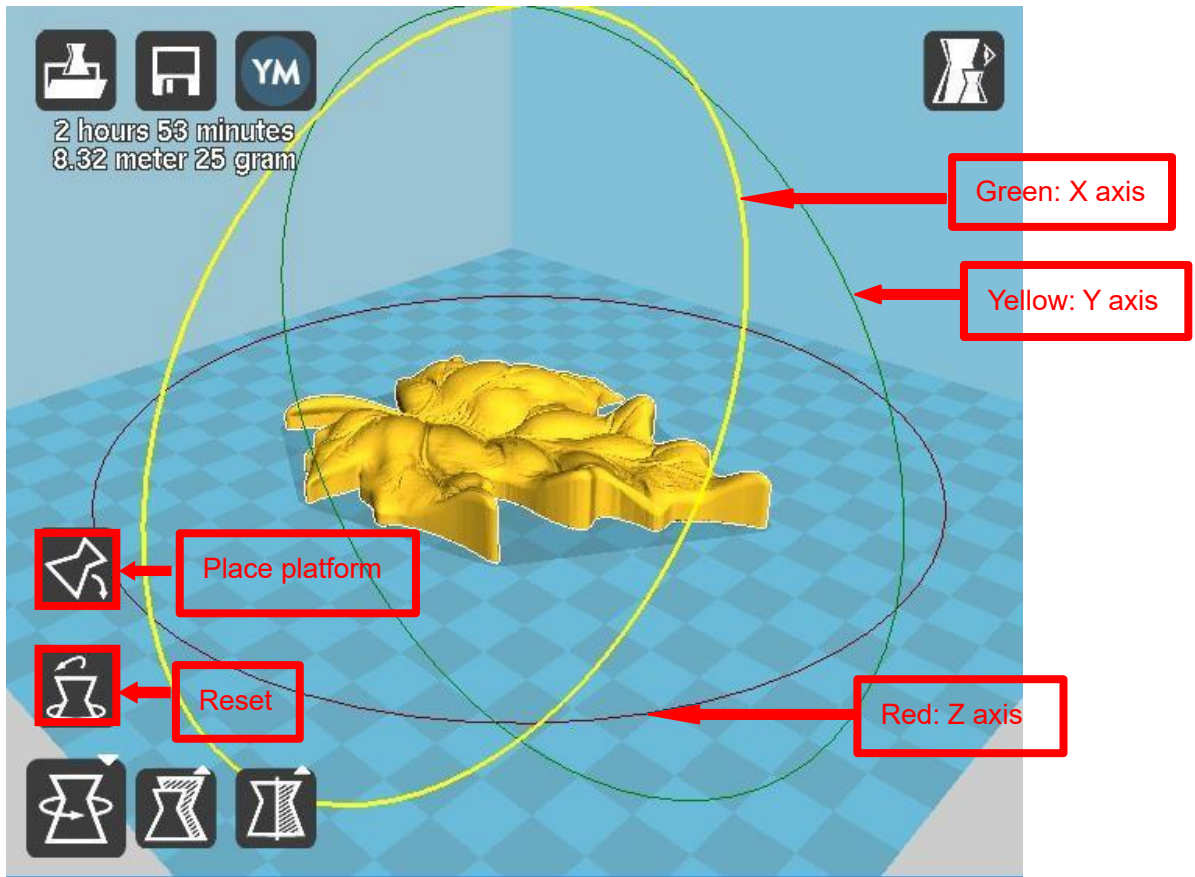|	
Combine everything (Type-A)	☑
Combine everything (Type-B)	☐
Keep open faces	☐
Extensive stitching	☐

[Ok]

Guidance to use Raft if needed: Expert → Expert Settings → Support → Support Types → Raft.
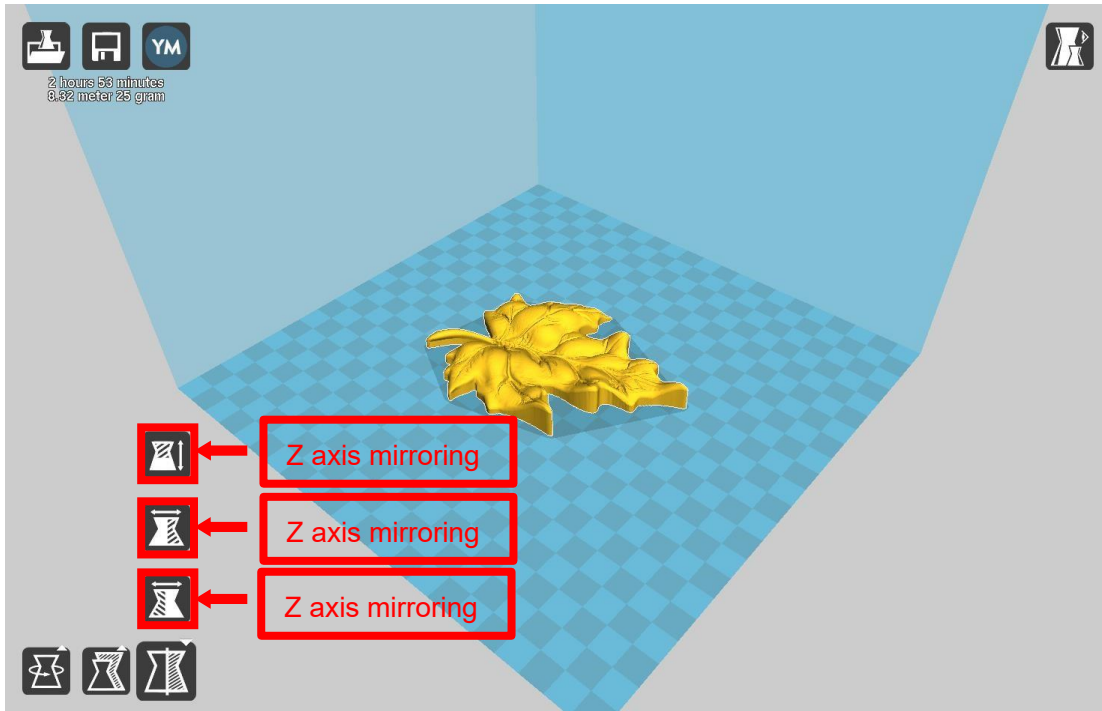
The images above are only for reference , please set the parameter according to actual requirement.
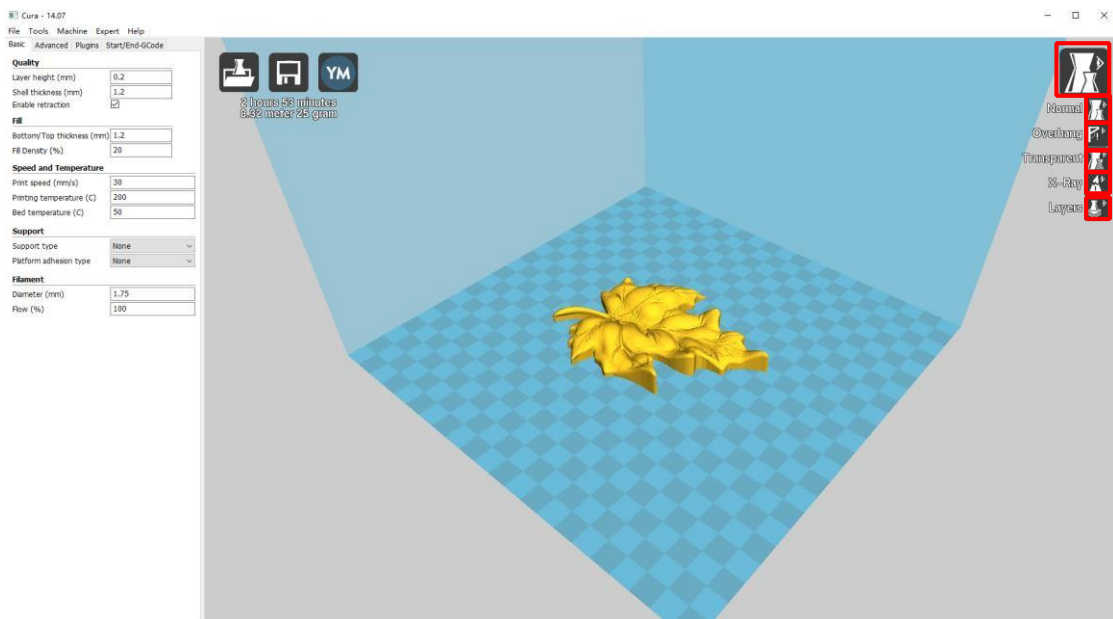
Load model

Save the Gcode file

Link to Youmagine

Model Display

Estimated Print Time

Estimated Length of Filament

Scaling

Whirling
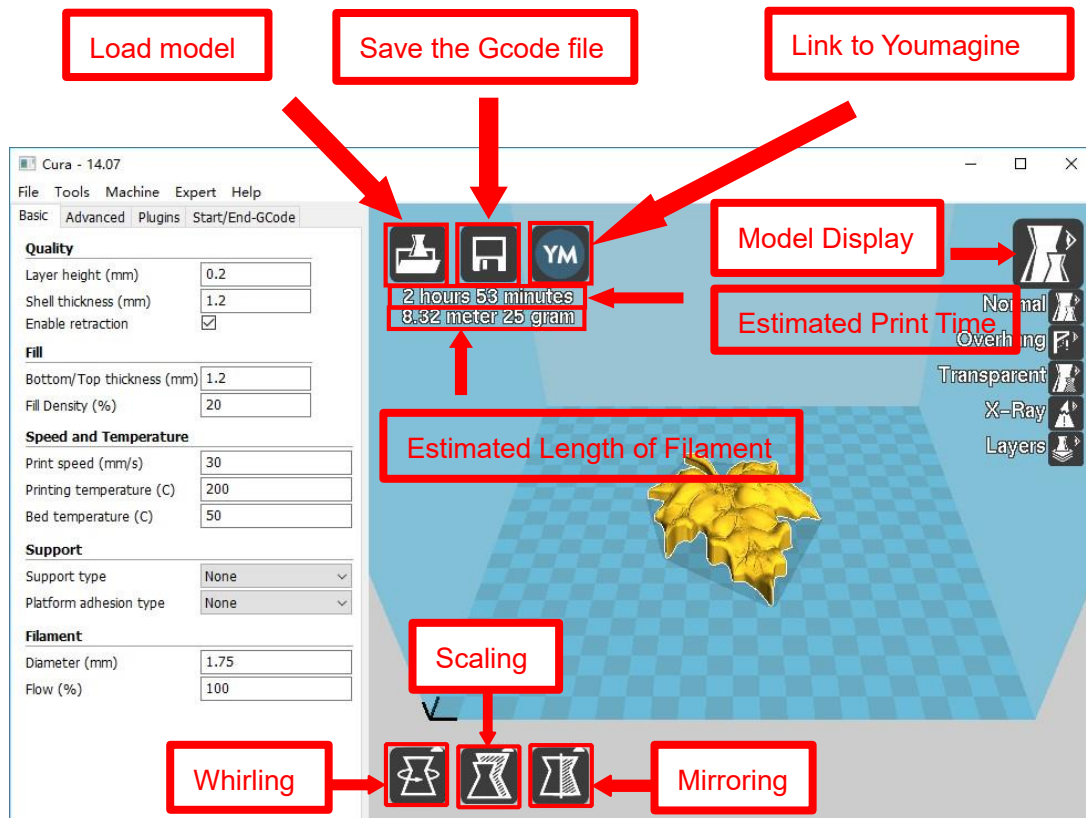
Mirroring

Left click the model and you will see the icon of "whirling, scaling, mirroring.
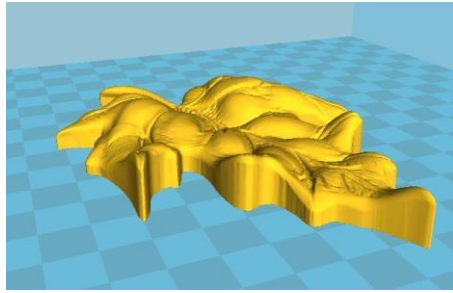
Left click to select model and move → move model.

Slide mouse wheel → scaling.

Right click to select model and move → whirling.

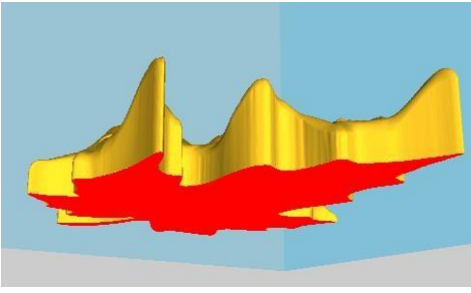Shift + right click platform and move → move platform

Green: X axis

Yellow: Y axis

Place platform

Reset

Red: Z axis

Zoom to max size

Scaling ratio

Modification ratio

Reset

Z axis mirroring

Z axis mirroring

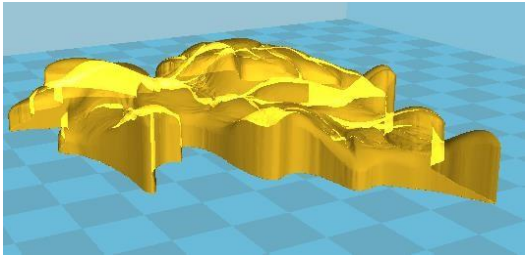Z axis mirroring
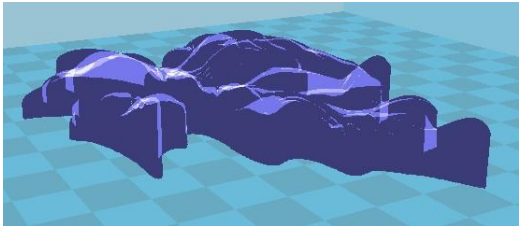
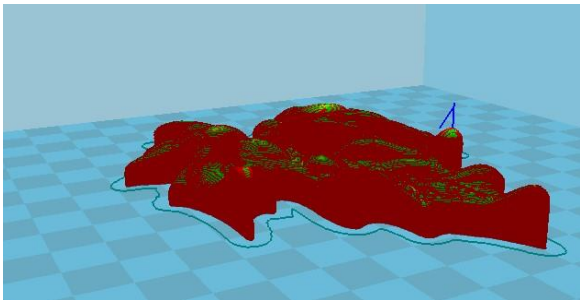Attention: The model will be converse after mirroring.
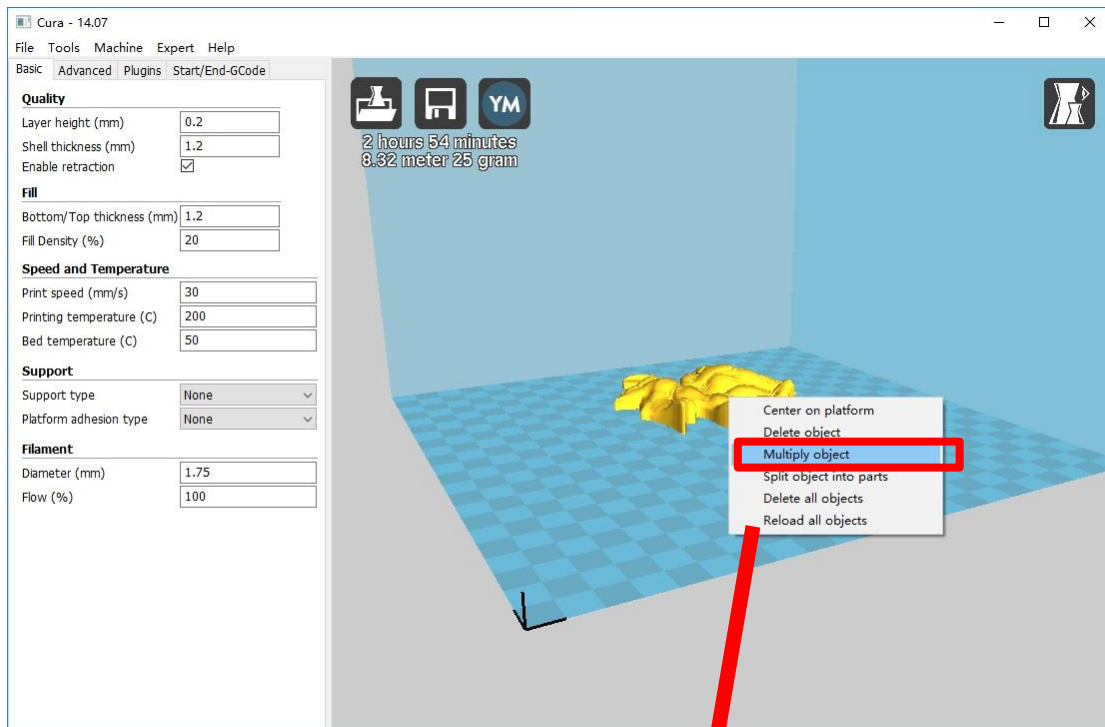
Normal: Most used.
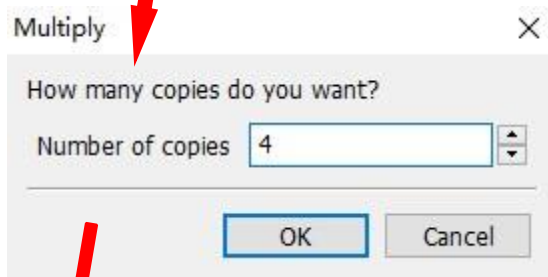

Overhang: Used to see the vacant part.

Transparent

X-Ray

Layers:Used to simulate the effect of each layer and the path.

Cura - 14.07

File Tools Machine Expert Help

Basic Advanced Plugins Start/End-GCode

Quality

Layer height (mm)	0.2
Shell thickness (mm)	1.2
Enable retraction	☑

Fill

| Bottom/Top thickness (mm) | 1.2 |
| Fill Density (%) | 20 |

Speed and Temperature

Print speed (mm/s)	30
Printing temperature (C)	200
Bed temperature (C)	50

Support

| Support type | None |
| Platform adhesion type | None |

Filament

| Diameter (mm) | 1.75 |
| Flow (%) | 100 |

2 hours 54 minutes
8.32 meter 25 gram

Center on platform
Delete object
Multiply object
Split object into parts
Delete all objects
Reload all objects

Right click model → Left click "Multiply object" → Example: copy 4 model

Multiply ✕

How many copies do you want?

Number of copies 4

OK   Cancel

5 models in total

Attention: You can try other functions by yourself.

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